

dimension, wood-like surface quality, good flammability resistance

and outdoor weather durability, made by the method that

comprises:

A.) forming a mixture containing:

(a) about 70 to about 100 parts by weight of vinyl chloride

resin;

(b) about 10 to about 100 parts by weight of a natural

cellulosic product;

(c) about 0.5 to about 10 parts by weight of vinyl chloride

resin foaming agent;

B.) mixing the aforesaid mixture in a hot mixer with

frictionally induced heating to temperatures of about 80

degrees Celsius and to about 140 degrees Celsius and

below the fusion temperature of polyvinyl chloride;

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- C.) subsequently mixing the mixture from said hot mixer in a cold mixer while cooling said mixture to a temperature of about 25 degrees Celsius to about 60 degrees Celsius;
- D.) plastifying and extruding the mixture through a plastifying and extruding means; and,
- E.) slowly cooling extruded product to create a synthetic wood-like product having an external foam skin and a foam core.

22. The synthetic wood-like product of claim 21 wherein said step A.) mixture further includes:

- (d) about 0.1 to about 100 parts by weight of additives selected from the group consisting of heat stabilizers, processing aids, colorants, lubricants, fillers, flame retardants, ultraviolet light inhibitors, and mixtures thereof.

23. The synthetic wood-like product of claim 21 wherein said plastifying and extruding steps are performed in an extruder.

24. The synthetic wood-like product of claim 21 wherein said mixing step in a hot mixer is performed to a temperature in the range of about 80 degrees Celsius to about 140 degrees Celsius.

25. The method of claim 21 wherein said cooling is performed in a roller system of a plurality of contra-rotating rollers.

26. The method of claim 25 wherein said cooling is further performed on a plurality of support rollers after said plurality of contra-rollers.

27. A synthetic wood-like product of low density, stable dimension, wood-like surface quality, good flammability resistance and outdoor weather durability, made by the method that comprises:

A.) forming a mixture containing:

(a) about 70 to about 100 parts by weight of vinyl chloride

resin;

(b) about 10 to about 100 parts by weight of a natural

cellulosic product;

(c) about 0.5 to about 10 parts by weight of vinyl chloride

resin foaming agent;

B.) mixing the aforesaid mixture in a hot mixer with

frictionally induced heating to temperatures of about 80

degrees Celsius and to about 140 degrees Celsius and

below the fusion temperature of polyvinyl chloride;

C.) subsequently mixing the mixture from said hot mixer in a cold mixer while cooling said mixture to a temperature of about 25 degrees Celsius to about 60 degrees Celsius;

D.) plastifying and extruding the mixture through a plastifying and extruding means; and,

E.) rapidly cooling extruded product to create a synthetic wood-like product having an external solid skin and a foam core.

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28. The synthetic wood-like product of claim 27 wherein said step A.) mixture further includes:

(d) about 0.1 to about 100 parts by weight of additives selected from the group consisting of heat stabilizers, processing aids, colorants, lubricants, fillers, flame retardants, ultraviolet light inhibitors, and mixtures thereof.

29. The synthetic wood-like product of claim 27 wherein said plastifying and extruding steps are performed in an extruder.

30. The synthetic wood-like product of claim 27 wherein said mixing step in a hot mixer is performed to a temperature in the range of about 80 degrees Celsius to about 140 degrees Celsius.

31. The method of claim 27 wherein the extruded product is cooled in a calibrating system rapidly to quench the extruded product so as to form a solid skin, foam core synthetic wood-like product.

32. The method of claim 31 wherein said calibrating system includes a precalibrator having a predetermined first